CLAIMS

1. A system for providing assistance in the regeneration of depollution means (1) associated with oxidation catalyst-forming means (2), the means being integrated in an exhaust line (3) of a motor vehicle diesel engine (4) and in which the engine (4) is associated with common manifold means (7) for feeding the cylinders of the engine with fuel, and being adapted at constant torque to implement a strategy of regeneration by injecting fuel into the cylinders in at least one post-injection, the system being characterized in that it comprises:

· means (8) for detecting a regeneration request (req.RG) and thus a request for post-injection;

· means (9) for detecting a period in which the engine is idling;

· means (11) for acquiring the temperature downstream from the catalyst-forming means (2);

· means (8) for determining a maximum quantity of fuel to be injected during post-injections while the engine is idling, on the basis of said temperature; and

· reduction means (7, 8) for progressively reducing the or each post-injection as soon as the quantity of fuel that has been injected reaches the predetermined maximum quantity.

2. A system according to claim 1, characterized in that the reduction means (7, 8) are adapted to reduce the or each post-injection in application of a calibratable slope (18).

3. A system according to claim 1 or claim 2, characterized in that the depollution means (1) comprise a particle filter.

4. A system according to claim 1, 2, or 3, characterized in that the depollution means (1) comprise a NOx trap.

5. A system according to any preceding claim, characterized in that the fuel includes an additive for becoming deposited together with the particles with which it is mixed on the depollution means (1) in order to facilitate regeneration thereof.

6. A system according to any one of claims 1 to 4, characterized in that the fuel includes an additive forming a NOx trap.

7. A system according to any preceding claim, characterized in that the engine is associated with a turbocharger (5, 6).